Abstract

In accordance with the present invention, there are provided (1) various cell lines derived from hypothalamus and Langerhansislets of mammals, (2) process for producing an active peptide and expression cloning system of active peptide precursor gene using the cell line as a host, (3) a method of screening or evaluating a substance capable of acting on the cells using the cell line, (4) a method of screening or isolating a useful gene or useful peptide using the cell line and (5) a highly-sensitive and simple assay system for GPCR ligand used in the above expression cloning system.